



**Air Quality Permitting
Statement of Basis**

February 11, 2005

**Tier II Operating Permit
No. T2-040030**

Mike's Sand & Gravel, Boise, Idaho

Facility ID No. 001-00184

Prepared by:

**Shawnee Chen, P.E., Senior Engineer
AIR QUALITY DIVISION**

FINAL

Table of Contents

ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE	3
1. PURPOSE.....	4
2. FACILITY DESCRIPTION	4
3. FACILITY / AREA CLASSIFICATION.....	4
4. APPLICATION SCOPE.....	4
5. PERMIT ANALYSIS	5
6. PERMIT CONDITIONS	6
7. FEES.....	7
8. PUBLIC COMMENT.....	7
9. RECOMMENDATION.....	7
10. AIRS INFORMATION	8

Acronyms, Units, and Chemical Nomenclature

AFS	AIRS Facility Subsystem
AIRS	Aerometric Information Retrieval System
AQCR	Air Quality Control Region
BRO	DEQ's Boise Regional Office
CFR	Code of Federal Regulations
CO	carbon monoxide
DEQ	Department of Environmental Quality
EPA	U.S. Environmental Protection Agency
HAPs	hazardous air pollutants
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
MACT	Maximum Available Control Technology
NESHAP	Nation Emission Standards for Hazardous Air Pollutants
NO_x	nitrogen oxides
NSPS	New Source Performance Standards
O&M	Operation & Maintenance
PM₁₀	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
PSD	Prevention of Significant Deterioration
PTE	potential to emit
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SM	synthetic minor
SO₂	sulfur dioxide
T2 permit	Tier II operating permit
T/hr	tons per hour
T/yr	tons per any consecutive 12-month period
T/day	tons per day
UTM	Universal Transverse Mercator
VOC	volatile organic compound

1. PURPOSE

The purpose for this memorandum is to satisfy the requirements of IDAPA 58.01.01 404.04, *Rules for the Control of Air Pollution in Idaho* for T2 permits.

2. FACILITY DESCRIPTION

This facility is a gravel mining, crushing, and screening facility. The maximum hourly throughput of the crushing and screening plant is 550 T/hr. The allowable throughput for the facility is 13,200 T/day and 600,000 T/yr (T/yr means tons of processed material per any consecutive 12-month period). Electricity is supplied to the facility by the local utility.

3. FACILITY / AREA CLASSIFICATION

This facility is classified as a minor facility because its potential to emit is less than all major source thresholds. This facility is not a designated facility (or a source listed pursuant to Section 302(j) of the Clean Air Act) and does not belong to any stationary source category which, as of August 7, 1980, is regulated under Sections 111 (NSPS) or 112 (NESHAP) of the CAA. Therefore, fugitive emissions do not aggregate towards the determination of major facility. This being the case, the AIRS facility classification is "B." The SIC code defining the facility is 1442.

This facility is located within AQCR 64 and UTM zone 11. The facility is located in Northern Ada County. Northern Ada County is a maintenance area for carbon monoxide and PM₁₀. Northern Ada County is designated as an attainment or unclassifiable area for all the rest of the criteria air pollutants.

The AIRS information provided in the Appendix defines the classification for each regulated air pollutant. This required information is entered into the EPA AIRs database.

4. APPLICATION SCOPE

This permitting action is a revision to an existing T2 permit. Specifically, Matzdorff Resources, LLC purchased Mike's Sand & Gravel in September 2003. Matzdorff Resources, LLC requests that DEQ document the change in ownership, but not change the name of the facility. The facility name remains "Mike's Sand & Gravel"; as does all references to the facility contained herein.

In addition, Mike's Sand & Gravel requests that DEQ remove the NSPS requirements (40 CFR 60, Subpart OOO) for its crushing and screening equipment because the all of this equipment was manufactured prior to the effective date of the regulation, August 31, 1983 (as certified by Mike's Sand & Gravel in accordance with IDAPA 58.01.01.123).

At the request of DEQ's Boise Regional Office (BRO), the following requirements have been added to the permit to better manage air quality in the Northern Ada Country PM₁₀ Maintenance Area:

- Fugitive dust management practices (BMP's)
- A daily crushing throughput limit
- The requirements of EPA Reference Method 22 for visible fugitive emissions
- Submit a fugitive dust control O&M manual to BRO for review

In the facility's existing permit, the only requirement for fugitive dust control is that required by IDAPA 58.01.01.651 *Rules for the Control of Fugitive Dust*. The fugitive dust BMP's prescribe the procedures to be followed to control fugitive dust. They are much more effective in controlling dust than the generalized conditions suggested by IDAPA 58.01.01.650.

The fugitive emissions limits, though not practically enforceable, remain in the permit since those limits were used in the modeling for the Northern Ada County PM₁₀ Maintenance Area.

4.1 Application Chronology

September 10, 2004	DEQ received a T2 permit application from Matzdorff Resources, LLC for a change in the ownership of the Mike's Sand & Gravel facility
October 18, 2004	DEQ declared the application complete
October 27, 2004	DEQ sent an information request regarding NSPS applicability for all crushing equipment
November 5, 2004	DEQ received the facility's certified response to DEQ's October 27, 2004, NSPS applicability letter

5. PERMIT ANALYSIS

This section of the Statement of Basis describes the regulatory requirements for this T2 permit.

5.1 Equipment Listing

The following is the list of crushing equipment and its date of manufacture. The equipment manufactured in 1983 was manufactured before August 31, 1983 as indicated in a certified equipment list submitted by Mike's Sand & Gravel.

Crushing Equipment

- Feeder (1975)
- Top soil grizzly (1982)
- Primary crushing: model number RC1Z, ID number CRPBLH (1983)
- Primary crushing: model number EJ, ID number CPPEJ (1980)

Conveyors

- Total of 26 conveyors (1972 through 1983)

Screening Equipment

- Primary screen: model number EJ5X16, ID number CRPS (1975)
- Secondary screen: model number EJSSP, ID number CRSS (1980)
- Top soil screen (1982)

5.2 Emissions Inventory

There is no increase in emissions associated with this permit revision; therefore, a new emissions inventory is not required.

5.3 Modeling

There is no increase in emissions associated with this permit revision; therefore, modeling is not required.

5.4 Regulatory Review

This section describes the regulatory analysis of the applicable air quality rules with respect to this T2 permit.

IDAPA 58.01.01.404.04..... Permit Revision or Renewal

This permitting action is a revision of Tier II Operating Permit No. 001-00184, issued July 12, 2002. There is not an emissions increase associated with this permit revision; therefore, a public comment period is not required in accordance with IDAPA 58.01.01.404.04.

IDAPA 58.01.01.407.02.c Tier II Operating Permit Processing Fee

The processing fee for a change in the ownership of the holder of a T2 permit is not required.

40 CFR 60 Subpart OOO..... Standards of Performance for Nonmetallic Mineral Processing Plants

Mike's Sand & Gravel has certified that all crushing, screening, and transfer equipment was manufactured prior to August 31, 1983, the effective date of regulation of 40 CFR 60, Subpart OOO. Because the equipment was manufactured prior to this date, Mike's Sand & Gravel is not subject to the requirement of 40 CFR 60, Subpart OOO.

6. PERMIT CONDITIONS

This section lists only those permit conditions that have changed or have been deleted as a result of this permit revision. All other permit conditions remain unchanged. Permit condition related to the revised permit are identified as Revised Permit Condition. Permit conditions related to the existing permit are identified as Existing Permit Condition.

- 6.1 Existing Permit Conditions 2.2.2 (NSPS performance testing), 3.3 (NSPS recordkeeping requirements), and 4.1 (NSPS reporting requirements) were deleted. These permit conditions regulated the crushing, screening, and transfer equipment in accordance with 40 CFR 60, Subpart OOO. As previously discussed, none of this equipment is subject to Subpart OOO because the equipment was manufactured before the effective date of the regulation.
- 6.2 Existing Permit Condition 1.2 was deleted at the request of BRO because fugitive dust emissions were being regulated in accordance with IDAPA 58.01.01.625, the point source opacity standard. BRO requested that EPA Method 22 be required instead.
- 6.4 Revised Permit Condition 2.2. EPA Method 22 is required to assess visible emissions crossing the property boundary. The text of Method 22 is included in the permit as requested by BRO.
- 6.5 Revised Permit Condition 3.2. A daily throughput limit of 13,200 T/day of processed material was added at the request of BRO to protect short-term PM₁₀ ambient standards.
- 6.6 Revised Permit Condition 3.4 was added to include fugitive dust BMP's to better manage fugitive dust and the air quality in the Northern Ada County PM₁₀ Maintenance Area.
- 6.7 Revised Permit Condition 4.2 was added to include monitoring and recordkeeping requirements for visible emissions limit.

- 6.8 Revised Permit Condition 4.3. Mike's Sand & Gravel is required to submit their fugitive dust O&M manual to BRO once received this permit. This is NOT an approval of the manual, rather, BRO will be able to review it, offer suggestions if required, and use the manual for inspections.
- 6.9 Existing Permit Condition 5.1 is renumbered as Revised Permit Condition 4.4. Existing Permit Section 5 is deleted.

7. FEES

Processing fees are not required for a change in name or ownership in accordance with IDAPA 58.01.01.407.02.c.

8. PUBLIC COMMENT

In accordance with IDAPA 58.01.01.404.04, a public comment period is not required because there is no emissions increase.

9. RECOMMENDATION

Based on the review of the application materials, and all applicable state and federal regulations, staff recommends that DEQ issue final Tier II Operating Permit No. T2-040030 to Mike's Sand & Gravel. No public comment period is required in accordance with IDAPA 58.01.01.404.04.

SC/sd Permit No. T2-040030

G:\Air Quality\Stationary Source\SS Ltd\T2\Mikes Sand & Gravel\Final\T2-040030 Final SB.doc

10. AIRS INFORMATION

AIRS/AFS^a FACILITY-WIDE CLASSIFICATION^b DATA ENTRY FORM

AIR PROGRAM	SIP	PSD	NSPS (Part 60)	NESHAP (Part 61)	MACT (Part 63)	TITLE V	AREA CLASSIFICATION A – Attainment U – Unclassifiable N – Nonattainment
POLLUTANT							
SO ₂	B						U
NO _x	B						U
CO	B						maintenance area
PM ₁₀	B						maintenance area
PT (Particulate)	B						U
VOC	B						U
THAP (Total HAPs)	B						
			APPLICABLE SUBPART				

^a Aerometric Information Retrieval System (AIRS) Facility Subsystem (AFS)

^b AIRS/AFS Classification Codes:

- A = Actual or potential emissions of a pollutant are above the applicable major source threshold. For NESHAP only, class "A" is applied to each pollutant which is below the 10 T/yr threshold, but which contributes to a plant total in excess of 25 T/yr of all NESHAP pollutants.
- SM = Potential emissions fall below applicable major source thresholds if and only if the source complies with federally enforceable regulations or limitations.
- B = Actual and potential emissions are below all applicable major source thresholds.
- C = Class is unknown.
- ND = Major source thresholds are not defined (e.g., radionuclides).